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"The Economic Impact of America's Failure to Contain the Coronavirus"

## What went wrong with the COVID-19 response in the U.S.? How did it compare to other countries? What are the economic costs of this failure?

#### Introduction

Our nation has suffered immensely from the coronavirus pandemic, losing over 200,000 of our fellow citizens. More Americans have been infected with and have died from this virus than citizens of any other nation in the world. With tens of millions of Americans losing their jobs and millions of small businesses shutting their doors, many of them permanently, the economic costs of this pandemic have been massive as well.<sup>1,2</sup>

Why has the U.S. response been so poor? Largely, we have failed to implement decisive, evidence-driven policies, which has resulted in poor virus control and led to large outbreaks across our country. This failure, on top of the underlying, long-standing lack of investment in our public health infrastructure, has resulted in America now representing 1 in 4 deaths worldwide from this pandemic. Probing deeper, there are three key points that I believe are critical as we consider the human and economic costs of our response to the pandemic.

First, most developed nations and many developing nations have done a far better job controlling the spread of SARS-CoV2 than we have. Second, there is no trade-off between controlling the spread of this virus and economic health. Indeed, much of the evidence suggests that nations who did a better job controlling the virus have had smaller hits to their economies and are currently suffering less than those countries who have done a poorer job. Finally, if our goal is to preserve lives and livelihoods, Congress can enable a path forward that will allow us to keep people safe, open our economies, and get people back to work.

#### Shortcomings of the U.S. Response

Relative to other nations, the U.S. COVID-19 response has fallen short. Responses to a disease outbreak can be divided into two main categories: public health efforts that control virus spread and biomedical responses that mitigate the harms of infection. We have done a relatively poor job on the former and a relatively good job on the latter.

Key parts of an effective public health response include social distancing, wearing masks, and establishing a robust testing and tracing infrastructure. Social distancing prevents the spread of the virus by ensuring that infected people do not get close to non-infected people. Lockdowns are the most extreme and harmful form of social distancing and should be used rarely and with full acknowledgment of the costs they incur. Over the past 6 months, we have come to learn much more about the spread of the virus and now know that the virus spreads most efficiently when large numbers of people gather indoors for extended periods of time. Even without a full lockdown, limiting large indoor gatherings provides considerable value in limiting viral transmission.

Another way to slow spread is by universal mask-wearing. As the CDC and others have acknowledged, asymptomatic individuals are major spreaders of this disease and can do so through laughing, talking, or even just breathing. Masks dramatically reduce droplet and aerosolized transmission. When everyone in a setting is wearing a mask, the spread of the virus, even in close contact, is very low.

Finally, a key approach to separating infected people from non-infected people is through testing, tracing, and supportive isolation. The notion here is simple – when we have extensive testing deployed in key areas, we are able to identify who is infected and who is not. By identifying

those who are infected, we can isolate them and prevent them from infecting others. By tracing their contacts, we can identify others who might have been infected and prevent them from infecting others as well. This is a longstanding public health strategy that has worked in a variety of disease outbreaks and can be, when deployed properly, quite effective.

Though it is clear that these three factors are critical to a successful public health response, the U.S. has failed to execute in each of these areas. First, a lack of federal leadership and guidance led to a national shutdown that was uncoordinated, fragmented, and incomplete. Some state leaders opened slowly and carefully, allowing science and data to drive their decisions. This ultimately allowed them to gradually revive their economies while keeping infections at bay. Others moved hastily and carelessly, rushing to reopen businesses as local case counts continued to climb. These rushed actions eventually led to outbreaks and further economic devastation.

Second, our federal leadership provided unclear guidance on mask-wearing in the early days of the pandemic and has continually failed to implement universal masking policies. It was not until April 3, 2020, that the CDC began to urge the general public to wear masks, after weeks of stating that masks were not an effective way to protect oneself from the virus.<sup>3,4</sup> While the association between mask mandates and a decline in daily COVID-19 growth has been well established, currently, only 34 states and the District of Columbia require face coverings in public.<sup>5,6</sup> Uncoordinated policies and a lack of clear guidance have left us with a patchwork of protection when it comes to masking which hindered and continues to impede our national response.

And finally, at the core of the U.S. COVID-19 response failure is our continued inability to test, trace, and isolate infected individuals. Our testing infrastructure has been inadequate from the beginning, starting with the CDC's decision to create and distribute its own COVID-19 diagnostic testing instead of using the widely available test approved by the WHO. The CDC's test was soon found to produce inconclusive results, and by mid-February, amidst vigorous undetected viral spread, the U.S. was only testing about 100 samples per day.<sup>7,8</sup> Right now, the U.S. is testing more individuals than ever; this past Saturday, just over 1 million samples were processed in a single day.<sup>9</sup> While this certainly reflects a trend in the right direction, it should not have taken nine months to get to this point, and the U.S. continues to fall behind necessary targets for disease suppression.<sup>10</sup> It is important to note, too, that the distribution of tests in the U.S. is far from equal: some labs across the country are overwhelmed with tests, providing results many days after the test is taken, reducing the value of the test, while others sit idle with excess capacity.<sup>14</sup> In addition, our country has failed to fund and implement a national contact tracing program, which has consequently forced each state to develop its own strategy. This has left many states without an adequate contact tracing workforce and unequipped to trace and isolate contacts of infected individuals.<sup>11</sup>

While the U.S. public health response has been relatively poor, we have demonstrated notable success in our biomedical response. We have rapidly developed new technologies and innovations, allowing us to lessen the harms of infection and reduce mortality rates. According to data from the CDC, the death rate for pneumonia, influenza, or COVID-19 has fallen from 23.6% back in April to 6.2% this past week.<sup>12</sup> This is at least in part attributable to improved treatments and therapies, such as Remdesivir, an antiviral medication approved by an Emergency Use

Authorization in May that has demonstrated reduced mortality and improved clinical recovery compared with the standard-of-care. Not only has the U.S. rapidly created novel therapies and treatments for COVID-19, but it has also worked toward the rapid development of a COVID-19 vaccine, leveraging our best academic institutions alongside the private sector. We have devoted substantial financial capital to vaccine development through Operation Warp Speed, investing over \$10 billion in eight different vaccine candidates.<sup>13</sup> While our country has demonstrated considerable biomedical advances and innovation in recent months, these developments are rendered useless when they are not paired with an effective public health response. In order for our country to successfully combat this virus, we must simultaneously invest in both our biomedical and our public health responses.

All of these issues can be attributed to the lack of effective guidance and leadership from the federal government. The lack of a national testing or contact tracing plan, the inadequate response from the FDA, and the stifling of the C.D.C. and its valuable data have all contributed to the poor U.S. response to the pandemic and unnecessarily cost thousands of American lives.

The lack of federal leadership in the control and suppression of COVID-19 has also had large, negative effects on our economy. Early and sustained failures to test, trace, and isolate cases of COVID-19 have necessitated the use of harsher, more impactful measures to control the spread of the virus: school and business closures, stay-at-home orders, and physical distancing. These actions, many of which would have likely been avoided or significantly reduced by earlier decisive federal intervention, have precipitated the worst economic crisis since the Great Depression. To make matters worse, many strategies aimed at restoring the U.S. economy have not been driven by data, resulting in avoidable and unnecessary spikes in cases and deaths.

Nine months since the first confirmed case of COVID-19 in the United States, our testing and contact tracing infrastructure remain weak, our economy is still suffering, and we continue to lead the world in cases and deaths. It is time for a different strategy.

#### Effective Strategies Around the Globe

As the pandemic has played out around the world, the extent of devastation and impact of the virus in each country has been largely determined by local leadership decisions. In mid-March, for example, the U.S. and South Korea had the same number of COVID-19 fatalities. Only a few weeks later, the course of the pandemic in these countries diverged substantially, with South Korea experiencing a total of 85 fatalities compared to the U.S.'s 62,000.<sup>16</sup> The difference between the two countries lies in what actions the leaders took in those few weeks.

While the U.S. response has proven disastrous, other countries have conceived relatively successful strategies for containment and control of the virus. For example, Germany, South Korea, and Japan have each employed effective responses to the virus and avoided unnecessary suffering and death. These countries implemented many of the beneficial strategies that our country neglected: rapid scaling of testing and contact tracing programs, clear messaging and educational campaigns, and swift, decisive actions to limit disease transmission.

In Germany, rapid and early development of diagnostic tests, diversification of testing resources, and increased testing proportional to easing of restrictions has yielded a relatively low death rate compared to its OECD neighbors (11.32 deaths per 100,000 compared to 65.27 in Spain, 62.94 in the U.K., 60.90 in the U.S., and 46.66 in France).<sup>1</sup> Additionally, many attribute the clear communication and decisive leadership of science-trained Chancellor Angela Merkel as a main driver of the country's relative success in controlling the pandemic.<sup>17,18</sup>

In South Korea, early, frequent, widely-available testing and isolation—coupled with a rigorous contact tracing infrastructure—led to rapid suppression. In addition, South Korea did not limit testing to symptomatic patients, and isolated specific hospitals to care only for COVID-19 patients. In early March, South Korea was testing more than 10,000 people per day, while the U.S. had only tested about 2,000 people in total. Today, South Korea has just under 23,000 total infections with only 383 fatalities.<sup>18</sup>

In Japan, an analog contact tracing system began in January, immediately after confirmation of the first infections. Utilizing this cluster-based approach early in the pandemic, Japan was able to conserve testing resources by pinpointing areas of infection and testing widely within those specific communities. Individuals that tested positive were then sent to hospitals designated for COVID-19 care, so as to reduce community spread within the healthcare system. In contrast to the U.S. response, Japan ensured clear communication and community education were central to their suppression efforts: the government utilized the straightforward messaging of the "Three C's – closed spaces, crowded places, and close-contact settings" to ensure that citizens understood how to best abide by social distancing protocols. With about 40% of the population size of the U.S., Japan today has just under 80,000 total cases and 1,508 fatalities.<sup>18-20</sup>

#### The Economic Costs of an Ineffective Response

Since the beginning of the pandemic, I have pushed back against the false dichotomy between saving lives and saving the economy. I believe, and the data bear this out, that a third path – where we prioritize public health and economic well-being simultaneously is the best approach. Here, we can keep Americans healthy while also allowing businesses and workplaces to largely remain open. While many have argued that we must choose between protecting our health and protecting our livelihoods, the data show quite the opposite.

Countries with some of the largest economic declines in Q2 of 2020 are also the ones with the highest COVID-19 death rates (**Figure 1**). Peru, for example, one of the countries that has been hit the hardest by the pandemic with a death rate of 868 per million, has experienced one of the most severe economic downturns: about 30% contraction. This pattern holds true regardless of population or GDP. The United Kingdom, for instance, has one of the highest death rates in the world (615 deaths per million), and has similarly experienced 21.7% GDP contraction compared to Q2 2019. In the U.S., we have experienced 552 deaths per million and an economic decline of 9.5% of GDP growth compared to 2019. In contrast, South Korea, aided by a data-driven rapid response to COVID-19, has experienced 6.3 deaths per million and a decline of only 3% of GDP growth.<sup>21</sup> Japan and Germany, with GDP contractions of 10% and 11.7%, and 10 and 110 deaths per million, respectively, also follow this trend, albeit to different degrees.

# Economic decline in the second quarter of 2020 vs rate of confirmed deaths due to COVID-19



The vertical axis shows the number of COVID-19 deaths per million, as of August 30. The horizontal axis shows the percentage decline of GDP relative to the same quarter in 2019. It is adjusted for inflation.



Figure 1: Economic decline in second quarter of 2020 vs rate of confirmed deaths due to COVID-19

Similar trends are clear when we consider unemployment rates this year in the U.S. compared with those in other countries. The increase in unemployment rates in the U.S. from January to April was 11 times larger than the average in other wealthy OECD nations. From January to July, U.S. unemployment claim increases remained five times larger than the average of other countries. In both unemployment rates and total per capita COVID-19 cases, the U.S. has performed significantly worse than any other wealthy OECD country.<sup>22</sup>

The data reveal that there is no health-economy trade-off from COVID-19: countries with the least-effective public health responses to the pandemic are those whose economies suffer the most (**Figure 1**). However, it must be noted that a public health crisis of this scale does not spare any economy in its entirety, regardless of response efficacy.

Early this month, Australia fell into recession for the first time since 1991. Despite a moderately strong initial response to the pandemic bolstered by the formation of a National Cabinet and strict lockdowns, the economy shrank 7% during Q2, the worst performance since the government began keeping records in 1959. Though recent outbreaks have necessitated strict lockdowns in certain areas, Australia has fared quite well in context: just under 27,000 total cases and 849 deaths in a country of 25 million. Economists and experts agree, though, that despite the current economy (which is among the lowest contractions in the OECD wealthy nations), Australia

is well poised to bounce back from this recession, thanks in part to its continued efforts in suppressing the virus.<sup>23,24</sup>

Likewise, New Zealand, whose strong and early suppression strategies have set the international gold standard for pandemic response, is also experiencing economic contraction. In Q2, New Zealand's GDP shrank by 12.2%, its first recession since 2009 and worst since 1987. Strict national lockdown measures, widespread testing and contact tracing, and decisive, evidence-based action by government leaders allowed New Zealand, a country of just under 5 million, to essentially declare the pandemic over on June 8 of this year, only 103 days, 1,815 cases, and 25 deaths after its first identified case. While seven weeks of a national stay-at-home order certainly had negative short-term impacts on the economy, government officials and outside economists agree that the country's success in virus suppression will lead to a fast, strong, and possibly record-breaking economic recovery.<sup>25,26</sup>

#### Conclusion

At this most precarious and uncertain time in our nation's and our world's history, we owe it to our fellow citizens to act expeditiously and steadfastly in our quest to end the COVID-19 pandemic. Nine months since our first confirmed case, we continue to feel the painful effects of a disjointed and, at times, absent, federal response to the pandemic in this country. Tens of millions of Americans remain out of work, millions are sick, and hundreds of thousands are dead. We have no national testing strategy, receive muddled guidance from our federal health agencies, and our economy is in its worst state since the Great Depression of 1929. Let me be clear: this does not have to continue.

We know from data and from the experiences of other countries that successful COVID-19 suppression and long-term economic prosperity are not mutually exclusive. As other countries have shown us, we do not have to choose between the value of a human life and the value of an economy. There is another way, whereupon we can prioritize both the well-being of American citizens and the well-being of the American economy. To do so, we must critically re-evaluate our own practices and re-energize organizations and individuals across the country. We must adapt to the new economic landscape of COVID-19, re-evaluating our personal, professional, and governmental roles in society. Above all else, we must prioritize the lives and livelihood of our fellow Americans.

If we wish to save our economy and our citizens, we must act now.

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